

## CHAPTER 10 RAILROAD/HIGHWAY AT-GRADE CROSSING

### CONTENTS

Section	Subject	Page Number
10.1	TYPES OF PROJECTS .....	10-1
10.2	FEDERAL FUNDING .....	10-1
10.3	CLASSIFICATION OF PROJECTS AND THE RAILROAD, OR LOCAL, SHARE OF COST .....	10-2
10.4	FEDERAL PARTICIPATION .....	10-2
	Grade Crossing Improvements .....	10-3
10.5	DESIGN .....	10-3
10.6	LOCAL AGENCY/RAILROAD AGREEMENTS .....	10-3
10.7	RAILROAD EASEMENT AGREEMENTS .....	10-4
10.8	APPLICATION TO THE CALIFORNIA PUBLIC UTILITIES COMMISSION .....	10-4
10.9	RAILROAD FACILITIES STATEMENT IN RIGHT OF WAY CERTIFICATION.....	10-5
10.10	STEP-BY-STEP GENERAL PROCEDURES FOR GRADE CROSSING IMPROVEMENT PROGRAM APPLICATIONS FOR FEDERAL AID .....	10-5



## CHAPTER 10 RAILROAD/HIGHWAY AT-GRADE CROSSING

### 10.1 INTRODUCTION

The purpose of the Railroad-Highway At-Grade Crossing Program is to reduce the number and severity of highway accidents by eliminating hazards to vehicles and pedestrians at existing railroad crossings. The program is authorized by Title 23, United States Code, Section 130 (23 USC 130) and addresses the development of railroad-highway at-grade crossing improvement projects.

Railroad-highway at-grade crossing improvement projects include, but are not limited to grade crossing eliminations via:

- relocation or realignment of highway(s),
- relocation or realignment of railroad(s), and
- closure of crossing(s).

Other railroad/highway improvement projects are those which use railroad properties or require adjustments to railroad facilities, including, but not limited to, upgrading of safety devices to a state-of-the-art condition.

NOTE: The California Public Utilities Commission (CPUC) recommends the types of improvements which are needed to eliminate vehicular and pedestrian hazards. Because of the limited amount of funds the CPUC must be included to clarify the extent of relocation or realignment of highway and railroad projects that are eligible under the 130 program. Moreover, railroad-highway at-grade crossing must be included on the list of public crossings recommended for improvement by the CPUC to qualify for Federal funds. Improvements not listed by the CPUC will not be funded via Section 130.

Work performed prior to Federal project authorization (see Chapter 3, "Project Authorization" in the *Local Assistance Procedures Manual*) is not eligible for Federal reimbursement via Section 130.

Section 130 funding is not available for removal of abandoned railroad tracks.

### 10.2 FEDERAL FUNDING

Federal funding for the Railroad-Highway Grade Crossing Program is derived from the annual apportionment for the Surface Transportation Program (STP). Ten percent of the annual STP apportionment is reserved for the safety programs defined by Sections 130 (railroad-highway crossing improvements) and 152 (hazard elimination projects). The estimated program funding level for the Railroad-Highway Grade Crossing Program is approximately \$8 million per year.

## 10.3 CLASSIFICATION OF PROJECT AND RAILROAD OR LOCAL SHARE OF COST

The non-Federal share of project costs is normally the responsibility of the local agency with jurisdiction for the highway-railroad grade crossing. Under ISTEA, the Federal share of participation on Section 130 projects is 90 percent. Generally, the local agency is responsible for the non-Federal share of 10 percent. The commitment to pay the 10 percent is established through the execution of a Program Supplement Agreement to the Master Agreement between the State and the local agency.

Failure of the local agency to honor commitments made in the Program Supplement contract with Caltrans results in a reduction of the local agency's claim on future gasoline tax revenues.

State law requiring railroads to share in the cost of work at railroad/highway grade crossings does not apply to Federal-aid projects.

Pursuant to Title 23 U.S.C. 130(b) and 49 Code of Federal Regulation (CFR) 1.48:

- There shall be no required railroad share of the costs for grade crossing improvements.
- There shall be no required railroad share of the costs for grade crossing improvements that involve the elimination of grade crossings at which active warning devices are not in place nor have been ordered installed by the CPUC.
- The railroad share of projects that involve the closing of grade crossings at which active warning devices are in place or have been ordered installed by the CPUC shall be five percent (5%).

Railroads may voluntarily contribute a greater share of project cost than is required. Also, other parties may voluntarily assume the railroad's or local agency's share.

The local agency is responsible for maintaining advance warning signs and pavement markings according to the specifications of Chapter 8 of the *Manual on Uniform Traffic Control Devices for Streets and Highways*, (MUTCD).

State Grade Crossing Improvement funding available through the Clean Air and Transportation Improvement Act of 1990 is obtained through local agency application with the California Transportation Commission (CTC).

## 10.4 FEDERAL PARTICIPATION

Federal funds are not available to cover costs incurred solely for the benefit of the railroad. Federal funds may participate in the cost of providing space for future track requirements when it is established to the satisfaction of CPUC, Caltrans and the Federal Highway Administration (FHWA) that additional tracks will be needed within a reasonable amount of time. Specifically, the railroad companies must first file an application with the CPUC for authority to add any such tracks at a crossing; and, the level of funding participation, based on an approved application, will require CPUC, Caltrans and FHWA concurrence.

## GRADE CROSSING IMPROVEMENTS

Traffic control devices and pavement markings shall comply with the latest edition of the MUTCD supplemented to the extent applicable to State standards and the current Association of American Railroads (AAR) *Bulletin on Recommended Practices for Railroad/Highway Grade Crossing Warning System*. State standards require advance warning signs (W47) at all crossings. Such grade crossing warning devices should also comply with the CPUC Standards as specified in CPUC's General Orders.

### 10.5 DESIGN

Facilities that are the responsibility of the railroad for maintenance and operation shall conform to the standards used by the railroad in its normal practice, subject to approval by Caltrans.

Restrictions apply when a railroad-highway grade crossing is located within the limits of or near the terminus of a Federal-aid project for construction of a highway or improvement of an existing highway. For such a location, the crossing shall not be opened for unrestricted use by traffic or the project accepted by Caltrans and CPUC until adequate warning devices, advance warning signs, and pavement markings are installed and functioning properly.

On projects where Federal-aid funds are used, the type of protection needed is determined by the CPUC.

For crossings where automatic gates with flashing light signals are not required, the type of warning device to be installed is subject to the approval of Caltrans and the CPUC.

Funding will not be obligated on grade crossing improvement projects that have pending right of way acquisitions.

### 10.6 LOCAL AGENCY/RAILROAD AGREEMENTS

Where construction of a Federal-aid project requires the use of railroad properties or the adjustment to railroad facilities, there shall be an agreement in writing between the local agency and the railroad. A copy of the proposed agreement must be sent to the appropriate Caltrans district for review. No special form of written agreement is prescribed. Such agreements usually consist of a formal document signed by officers who are authorized to bind the parties thereto. In appropriate cases, the agreement may consist of an exchange of correspondence which sets forth all the essential terms and conditions. A format similar to a Caltrans Service Contract is recommended.

The written agreement between the local agency and the railroad shall include the following where applicable:

- A clause stating, "*The Company's books pertaining to the work shall be open to inspection and audit by representatives of the State and FHWA for a three-year period after FHWA payment of final voucher,*"
- A detailed statement of the work to be performed by each party,
- A method of payment,

- The extent to which the railroad is obligated to move or adjust the facilities at its own expense,
- The railroad's share of the cost,
- An itemized cost estimate of the work to be performed by the railroad,
- The method to be used for performing the work, either by railroad forces or by contract,
- Identification of the party or parties responsible for maintenance,
- The form, duration, and amounts of any needed insurance,
- References to plans and specifications,
- A definition of those conditions, under which protective services will be performed by the railroad during the work. The nature of such protective services will be defined, along with a method of reimbursement to the railroad, and
- Whatever detailed plans of the existing situation the local agency may have that will aid the railroad in the expeditious design and construction of the proposed improvement.

When requested in writing by the local agency, the District shall negotiate a service contract with the railroad on the local agency's behalf.

On Force Account projects, the railroad shall submit to Caltrans four (4) copies of invoices according to the form described in the Service Contract. Caltrans audits all bills for compliance with applicable Federal regulations to determine the eligibility of the items.

As soon as possible, the local agency shall furnish the railroad plans of proposed work.

The plans should be drawn to scale and should show the following:

- Plan of crossing,
- Existing and proposed protection,
- Width of paving,
- Tracks,
- Significant topography,
- Limits of right of way,
- A profile of highway approaches, and
- Other details sufficient to allow proper location of protective devices.

This procedure is followed to aid in maintaining a high level of communication between the railroad and the local agency, in order to coordinate construction of each parties' responsibilities.

## **10.7 RAILROAD EASEMENT AGREEMENTS**

The local agency enters into its own easement agreement with the railroad to secure the necessary rights of way. A copy of the fully executed easement agreement shall be furnished to the District.

## **10.8 APPLICATION TO THE CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC)**

Section 1201 of the CPUC Code provides that no public road, highway, or street shall be constructed across the track of any railroad at grade, nor shall the track of any railroad be constructed across a public road, highway, or street without first securing permission from the CPUC. CPUC permission is also required to alter, relocate, abandon, or close any railroad/highway crossing.

All applications or notices to the CPUC to construct or alter any grade crossing on a county road or city street are filed by the local agency. Applications or notices should be filed as soon as the plans are sufficiently developed to show work proposed at the crossing. Three (3) copies of the application and three (3) copies of the CPUC decision shall be furnished to the District. The CPUC should be requested to reply in respect to the adequacy of the proposed protection. The definitions of **Application** and **Notice** are contained in CPUC General Order number 88. (G. O. 88)

## 10.9 RAILROAD FACILITIES STATEMENT IN RIGHT OF WAY CERTIFICATIONS

Local agency certifications regarding the status of affected railroad facilities must be verified. Documentation as to the acceptability of the local agency railroad facility arrangements must be on file before the right of way local assistance coordinator prepares the local agency certification form for signature by the appropriate right of way representative.

## 10.10 PROCEDURES FOR GRADE CROSSING IMPROVEMENT PROGRAM APPLICATIONS FOR FEDERAL-AID

1. The local agency contacts CPUC to determine recommendations for improvement using Federal funding. This process may involve a field review with representatives of the affected railroads, CPUC and Caltrans.
2. The local agency makes a preliminary commitment to fund the non-Federal share of the project's cost by submitting a letter to Caltrans and CPUC.
3. Caltrans assigns a preliminary year of funding prioritization to the project.
4. At regular intervals, the railroad is notified of the projects that are scheduled for funding.
5. Changes are made to the schedule of funding prioritization, incorporating comments and concerns of the CPUC, local agencies, Caltrans, and the railroads. Local agencies are responsible for including the appropriate information in the Transportation Improvement Plans (TIPs) through their Metropolitan Planning Organizations (MPOs)/Regional Transportation Planning Associations (RTPAs).

Local agencies are also responsible for conducting and documenting the necessary environmental reviews to ascertain any adverse environmental, see Chapter 6 "Environmental Procedures" in the *Local Assistance Procedures Manual*. Grade crossing improvements programs that, based on past experience with similar actions, do not involve significant environmental impacts may, as a minimum, document "Categorical Exclusions (CEs)" when such projects:

- Do not induce significant impacts to planned growth or land use for the area.
- Do not require the relocation of significant numbers of people.

- Do not have a significant impact on any natural, cultural, recreational, historic or other resource.
  - Do not involve significant air, noise, or water quality impacts.
  - Do not have significant impacts on travel patterns.
  - Do not otherwise, either individually or cumulatively, have ant significant environmental impacts.
6. The railroad submits an estimate for Force Account work.
  7. Caltrans executes a service contract with the railroad and assigns Federal funding according to the funding prioritization schedule.
  8. A Program Supplement Agreement is executed between Caltrans and the local agency to complete the commitment of local participation.
  9. The railroad performs Force Account work, or, if non-railroad (highway) work is involved, the contract is awarded through competitive bidding.
  10. The local agency is responsible for installing and maintaining advance warning signs and pavement markings.
  11. The railroad issues an “in-service” letter when work is complete.
  12. Caltrans performs an inspection, with or in consultation with the CPUC, to determine if the project is complete, and makes final payments, submits final vouchering, and performs an audit.